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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,980	12/22/2005	Kazuyuki Mikubo	081848-0194	1508

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FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

DUVERNE, JEAN F

ART UNIT	PAPER NUMBER
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2839

MAIL DATE	DELIVERY MODE
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01/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,980

Applicant(s)

MIKUBO ET AL.

Examiner

Jean F. Duverne

Art Unit

2839

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4-16, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 1, 4-15 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 16, 18 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

The Examiner has decided to issue a second non-final office action, because claims 16-19 were inadvertently included in the objected claims, which do contain the allowable subject matter.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 16, 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matlow (US patent 3,543,394).

In regard to claims 16 and 18, Matlow's device discloses a cooling device for an electronic equipment, comprising a substrate at the storage 27, a passage embedded in said substrate (see fig. 1 with lines embedded in the substrate) and passing therethrough refrigerant, a circulation pump at 29 with a line disposed on a surface of said substrate, and a reservoir at 30 communicated with said first passage via a branch hole, wherein said circulation pump circulates said refrigerant through said passage to radiate heat transferred to said substrate; wherein said reservoir is laid-down-type reservoir fixed onto said surface of said substrate. However, Matlow's device fails to explicitly disclose the arrangement or reservoir type. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the reservoir laid on the surface of the substrate or standing with substrate, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. It would have been obvious to one having ordinary skill in the art at the

time the invention was made to have the reservoir laid on the surface of the substrate or standing with substrate in order to meet the system requirement and specification.

In regard to claim 19, Matlow's device discloses a cooling panel at 13 including a bottom heat radiation plate at 14 and a top heat radiation plate with the heater (41), at least one of which is provided with a groove, said bottom heat radiation plate and top heat radiation plate being bonded together to form a passage of refrigerant (see fig. 1); and a circulation pump to circulate said refrigerant through said passage for radiating heat transferred to said cooling panel (see fig. 1), wherein: said top heat radiation plate is provide with an inlet port at 28 through which said refrigerant flows from said passage to said circulation pump and an outlet port through which said refrigerant flows from said circulation pump to said passage. However, Matlow's device fails to explicitly disclose the circulation pump being fixed into the panel or the ports. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the circulation pump being fixed into the panel or the ports, since it has been held that rearranging parts of an invention involves only routine skill in the art. In re Japikse, 86 USPQ 70. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the circulation pump being fixed into the panel or the ports in order to meet the system requirement and specification.

Conclusion

Claims 1, 4-15 are allowed (see allowable subject matter in the previous office action).

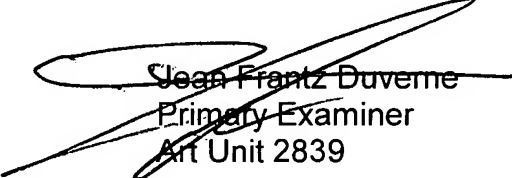
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean F. Duverne whose telephone number is (571) 272-2091. The examiner can normally be reached on 9:00-7:30, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, TC Patel can be reached on (571) 272-2098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JFD

01/28/2008


Jean Frantz Duverne
Primary Examiner
Art Unit 2839